BRUHAT BANGALORE MAHANAGARA PALIKE

Executive Engineer
Dasarahalli Division

EMB

Name of Work :-	Construction of C C Roads and Drains in Janatha Colony in Ward No.17
Est Cost :-	75.00 Lakhs
Job Code :-	017-23-000003
AS :-	EE/DD/AS/33/2022-23, Dt:- 18/11/2022
TS :-	CE/DZ/TS/24/2022-23, Dt: 21/11/2022
Work Order :-	EE/DD/WO/148/2022-23 Dt :- 16/03/2023
Name of Contractor:-	Sri. Shankarappa M, Sunkadakatte,Bangalore-560091.

AME OF WORK :-	**Construction of C C Roads and Drains in Janatha Colony in Ward No.17**
JC CODE :-	017-23-000003
WORK ORDER No :-	EE/DD/WO/148/2022-23 Dt :- 16/03/2023
AS No :-	EE/DD/AS/33/2022-23, Dt:- 18/11/2022
TS No :-	CE/DZ/TS/24/2022-23, Dt: 21/11/2022
ESTIMATE COST :-	75.00 Lakhs
DATE OF MEASURENENTS :-	

Sl No	Description	Unit	No	Measurements				Depth	Qty
				Length	Width W1	Width W2	Avg Width (W1+W2)/2		
1	Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02m3 in volume and stock piling at designated locations and disposal of dismantled materials and stacking serviceable and unserviceable materials separately								
	1st cross Bakeary Side Road								
	Ch 0.00 to 30.00m	Cum	1	30.00	3.50	3.90	3.70	0.30	33.30
	Ch 30.00 to 60.00m		1	30.00	3.90	4.00	3.95	0.30	35.55
	Ch 60.00 to 78.00m		1	18.00	4.00	2.80	3.40	0.30	18.36
	After Culvert								
	Ch 0.00 to 16.50m		1	16.50	2.80	1.90	2.35	0.30	11.63
	Ch 16.50 to 31.5.50m		1	15.00	1.10	0.90	1.00	0.30	4.50
	1st Main (Aladamara Road)								
	upto Culvert		1	23.20	6.20	5.60	5.90	0.30	41.06
	Aladamara side area		1	14.80	4.00	5.50	4.75	0.30	21.09
	from 6th Cross to End								
	Ch 0.00 to 30.00m		1	30.00	5.50	3.40	4.45	0.30	40.05
	Ch 30.00 to 60.00m		1	30.00	3.40	3.00	3.20	0.30	28.80
	Ch 60.00 to 90.00m		1	24.20	3.00	2.80	2.90	0.30	21.05
	6th Cross Road								
	Ch 0.00 to 30.00m		1	30.00	3.70	4.70	4.20	0.25	31.50
	Ch 30.00 to 45.50m		1	15.50	4.70	4.00	4.35	0.25	16.86
	Sahyadri Layout (Back to Front)								
	End Pice		1	6.00	2.00	1.90	1.95	0.25	2.93
	Ch 0.00 to 30.00m	Cum	1	30.00	3.60	3.40	3.50	0.25	26.25
	Ch 30.00 to 33.60m		1	3.60	3.40	2.90	3.15	0.25	2.84
	Triangle Pice		0.5	2.40	3.00	3.10	3.05		
	After Culvert								
	Ch 0.00 to 30.00m		1	30.00	4.90	4.00	4.45	0.30	40.05
	Ch 30.00 to 60.00m		1	30.00	4.00	4.00	4.00	0.30	36.00
	Ch 60.00 to 90.00m		1	30.00	4.00	4.40	4.20	0.30	37.80
	Ch 90.00 to 106.60m		1	10.60	4.40	4.30	4.35	0.30	13.83
	Ch 106.60 to 128.70m		1	28.10					
								TOTAL WORK DONE QTY	463.45
								QUANTITY LIMITED TO	453.08

K-Measurement/M2/CW2
Dt 10 TO 22/10/23

Excel'ನ
ಸಹಾಯಕ ಅಭಿವೃದ್ಧಿ ಅಧಿಕಾರಿರವರ
ಶ್ರೇಣಿಗೆ ಪರಿವರ್ತನೆ
ಮಾಡಿದೆ, ಶಿವಕುಮಾರ

Description	Unit	No	Measurements				Depth	Qty
			Length	Width		Avg Width (W1+W2)/2		
				W1	W2			
Cost of Haulage Excluding Loading and Unloading Case-1 : Surfaced Road (Taking output 10 tonnes load and lead 10 km = 100 t.km) complete as per directions of Engineer-in-charge.								
Qty vide item no -3 X10km X1.28		1	1296.96	10.00	1.28			16601.06
							TOTAL WORK DONE QTY	16601.06
							QUANTITY LIMITED TO	16366.60

K. Murthy 23/10/23

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಕೆಬ್ಬಹಳ್ಳ ಉಪವಿಭಾಗ
ಹಾಸನ, ಪೊಂಗಳೂರು

	Description	Unit	No	Length	W1	W2	Avg Width (W1+W2)/2	Depth	Qty
5	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately) Mix 1:4:8(M5) Using 40 mm and down size graded crushed coarse aggregates								
	For Drain								
	6th Sub Cross Road	Cum							
	Ch 0.00 to 30.00m		1	30.00			0.75	0.15	3.38
	Ch 30.00 to 60.00m		1	30.00			0.75	0.15	3.38
	Ch 60.00 to 79.00m		1	19.00			0.75	0.15	2.14
								TOTAL WORK DONE QTY	8.89
								QUANTITY LIMITED TO	7.42

K. Murthy 25/10/23

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಕೆಬ್ಬಹಳ್ಳ ಉಪವಿಭಾಗ
ಹಾಸನ, ಪೊಂಗಳೂರು

	Description	Unit	No	Length	W1	W2	Avg Width (W1+W2)/2	Depth	Qty
6	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately)M20 Design Mix Using 20 mm and down size graded crushed coarse aggregates								
	For Drain Btm Slab								
	6th Sub Cross Road	Cum							
	Ch 0.00 to 30.00m		1	30.00			0.75	0.15	3.38
	Ch 30.00 to 60.00m		1	30.00			0.75	0.15	3.38
	Ch 60.00 to 79.00m		1	19.00			0.75	0.15	2.14
	Wall								
	Ch 0.00 to 30.00m		2	30.00			0.12	0.45	3.24
	Ch 30.00 to 60.00m		2	30.00			0.12	0.45	3.24
	Ch 60.00 to 79.00m		2	19.00			0.12	0.45	2.05
								TOTAL WORK DONE QTY	17.42
								QUANTITY LIMITED TO	17.32

K. Murthy 27/10/23 TO 2/11/23

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಕೆಬ್ಬಹಳ್ಳ ಉಪವಿಭಾಗ
ಹಾಸನ, ಪೊಂಗಳೂರು

Description	Unit	No	Measurements				Depth	Qty
			Length	Width W1	Width W2	Avg Width (W1+W2)/2		
Appendix I – Additionalities for Formwork, Centering & Scaffolding 2.Foundation, Sub structure of Cross drainages								
2%								17.42
Qty vide item no -6	Cum	1	17.42					17.42
							TOTAL WORK DONE QTY	17.42
							QUANTITY LIMITED TO	17.32

K. Muralidhar 28/10/23

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
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8 Supplying, Fitting and Placing TMT Fe 500 & above Reinforcement in Foundation/Substructure/Superstructure complete as per Drawing and Technical Specifications.

			No	L	T/L	W/m	T.W	
U Bar 10mm	Sqm		317	1.55	491.35	0.617	303.30	303.30
Dist			8.00	79.00	632.00	0.617	390.12	390.12
		1				0.80		693.43
				693.43	/1000	=		0.69
							TOTAL WORK DONE QTY	0.69
							QUANTITY LIMITED TO	0.48

K. Muralidhar 26/10/23

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು

9 Providing and laying 100mm thick pre-cast cover slabs over Rain water harvesting pit of width not exceeding 1000 mm using M20 concrete reinforced with TMT bars Fe 500 @ 6kg/m2, slabs jointed in CM 1:3 proportion and nicely finished Including providing holes in the Cover slabs wherever necessary for easy drainage of surface water including: of labour, materials, scaffolding, usage of machinery, curing, lead and lift charges etc, Complete.

pre-cast cover slabs	Sqm							
6th cross		20	0.60	0.75				9.00
6th sub cross		48	0.60	0.75				21.60
5th cross		32	0.60	0.90				17.28
1cross bakeary side		47	0.60	0.75				21.15
		29	0.60	0.75				13.05
1st main(Aladamara Road)		55	0.60	0.75				24.75
Cross Road		38	0.60	0.75				17.10
		24	0.60	0.75				10.80
Shayadri Layout		42	0.60	0.90				22.68
		26	0.60	0.90				14.04
							TOTAL WORK DONE QTY	171.45
							QUANTITY LIMITED TO	162.00

cc/dc E.E. (D.D.)

K. Muralidhar 9/11/23

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
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10 Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub- base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density

1st cross Bakeary Side Road	Cum							
Ch 0.00 to 30.00m		1	30.00	3.50	3.90	3.70	0.15	16.65

Description	Unit	No	Measurements				Depth	Qty
			Length	Width		Avg Width (W1+W2)/2		
				W1	W2			
30.00 to 60.00m		1	30.00	3.90	4.00	3.95	0.15	17.78
n 60.00 to 78.00m		1	18.00	4.00	2.80	3.40	0.15	9.18
After Culvert								
Ch 0.00 to 16.50m		1	16.50	2.80	1.90	2.35	0.15	5.82
Ch 16.50 to 31.5.50m		1	15.00	1.10	0.90	1.00	0.15	2.25
1st Sub Cross		1	28.80	1.50	1.30	1.40	0.15	6.05
1st Main (Aladamara Road)								
Ch 0.00 to 30.00m	Cum	1	30.00	6.50	6.00	6.25	0.15	28.13
Ch 30.00 to 60.00m		1	30.00	6.00	6.10	6.05	0.12	21.78
Ch 60.00 to 63.00m		1	3.00	6.10	5.60	5.85	0.12	2.11
upto Culvert		1	23.20	6.20	5.60	5.90	0.15	20.53
Aladamara side area		1	14.80	4.00	5.50	4.75	0.15	10.55
from 6th Cross to End								
Ch 0.00 to 30.00m		1	30.00	5.50	3.40	4.45	0.15	20.03
Ch 30.00 to 60.00m		1	30.00	3.40	3.00	3.20	0.15	14.40
Ch 60.00 to 90.00m		1	24.20	3.00	2.80	2.90	0.15	10.53
5th cross		1	26.20	4.90	4.00	4.45	0.15	17.49
6th Cross Road								
Ch 0.00 to 30.00m		1	30.00	3.70	4.70	4.20	0.15	18.90
Ch 30.00 to 45.50m		1	15.50	4.70	4.00	4.35	0.15	10.11
6th Sub Cross Road								
Ch 0.00 to 30.00m		1	30.00	2.40	3.50	2.95	0.15	13.28
Ch 30.00 to 60.00m		1	30.00	3.50	3.00	3.25	0.15	14.63
Ch 60.00 to 79.00m		1	19.00	3.00	3.50	3.25	0.15	9.26
Sahyadri Layout (Back to Front)								
End Pice		1	6.00	2.00	1.90	1.95	0.15	1.76
Ch 0.00 to 30.00m		1	30.00	3.60	3.40	3.50	0.15	15.75
Ch 30.00 to 33.60m		1	3.60	3.40	2.90	3.15	0.15	1.70
Triangle Pice		0.5	2.40	3.00	3.10	3.05	0.15	0.55
After Culvert								
Ch 0.00 to 30.00m		1	30.00	4.90	4.00	4.45	0.15	20.03
Ch 30.00 to 60.00m		1	30.00	4.00	4.00	4.00	0.15	18.00
Ch 60.00 to 90.00m		1	30.00	4.00	4.40	4.20	0.15	18.90
Ch 90.00 to 106.6.00m		1	10.60	4.40	4.30	4.35	0.15	6.92
Ch 106.60 to 128.70m		0.5	28.10	3.30	4.00	3.65	0.15	
							TOTAL WORK DONE QTY	353.02
							QUANTITY LIMITED TO	347.47

3/11/23 to 6/11/23

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ಶೆಟ್ಟಿಹಳ್ಳಿ ಉಪವಿಭಾಗ
ಬಿಬಿಎಂಪಿ, ಪೆಂಗಳೂರು

Description	Unit	No	Measurements					Qty
			Length	Width		Avg Width (W1+W2)/2	Depth	
				W1	W2			
11 Dry Lean Cement Concrete Sub- base Construction of dry lean cement concrete Sub- base over a prepared sub-grade with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 25 mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per table 600-1, cement content not to be less than 150 kg/ m3, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 t vibratory roller, finishing and curing.								
1st cross Bakeary Side Road								
Ch 0.00 to 30.00m	Cum	1	30.00	3.50	3.90	3.70	0.15	16.65
Ch 30.00 to 60.00m		1	30.00	3.90	4.00	3.95	0.15	17.78
Ch 60.00 to 78.00m		1	18.00	4.00	2.80	3.40	0.15	9.18
After Culvert								
Ch 0.00 to 16.50m		1	16.50	2.80	1.90	2.35	0.15	5.82
Ch 16.50 to 31.5.50m		1	15.00	1.10	0.90	1.00	0.15	2.25
1st Sub Cross		1	28.80	1.50	1.30	1.40	0.15	6.05
1st Main (Aladamara Road)								
Ch 0.00 to 30.00m	Cum	1	30.00	6.50	6.00	6.25	0.12	22.50
Ch 30.00 to 60.00m		1	30.00	6.00	6.10	6.05	0.12	21.78
Ch 60.00 to 63.00m		1	3.00	6.10	5.60	5.85	0.12	2.11
upto Culvert		1	23.20	6.20	5.60	5.90	0.15	20.53
Aladamara side area		1	14.80	4.00	5.50	4.75	0.15	10.55
from 6th Cross to End								
Ch 0.00 to 30.00m		1	30.00	5.50	3.40	4.45	0.15	20.03
Ch 30.00 to 60.00m		1	30.00	3.40	3.00	3.20	0.15	14.40
Ch 60.00 to 90.00m		1	24.20	3.00	2.80	2.90	0.15	10.53
5th cross		1	26.20	4.90	4.00	4.45	0.15	17.49
6th Cross Road								
Ch 0.00 to 30.00m		1	30.00	3.70	4.70	4.20	0.15	18.90
Ch 30.00 to 45.50m		1	15.50	4.70	4.00	4.35	0.15	10.11
6th Sub Cross Road								
Ch 0.00 to 30.00m		1	30.00	2.40	3.50	2.95	0.15	13.28
Ch 30.00 to 60.00m		1	30.00	3.50	3.00	3.25	0.15	14.63
Ch 60.00 to 79.00m		1	19.00	3.00	3.50	3.25	0.15	9.26
Sahyadri Layout (Back to Front)								
End Pice		1	6.00	2.00	1.90	1.95	0.15	1.76
Ch 0.00 to 30.00m		1	30.00	3.60	3.40	3.50	0.15	15.75
Ch 30.00 to 33.60m		1	3.60	3.40	2.90	3.15	0.15	1.70
Triangle Pice		0.5	2.40	3.00	3.10	3.05	0.15	
After Culvert								
Ch 0.00 to 30.00m		1	30.00	4.90	4.00	4.45	0.15	20.03
Ch 30.00 to 60.00m		1	30.00	4.00	4.00	4.00	0.15	18.00
Ch 60.00 to 90.00m		1	30.00	4.00	4.40	4.20	0.15	18.90
Ch 90.00 to 106.6.00m		1	10.60	4.40	4.30	4.35	0.15	6.92
Ch 106.60 to 128.70m		0.5	28.10	3.30	4.00	3.65	0.15	
							TOTAL WORK DONE QTY	346.85
							QUANTITY LIMITED TO	347.47

7/11/23 to 10/11/23

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಲೆಕ್ಕಪತ್ರ ಉಪವಿಭಾಗ
ಬಿಬಿಎಂಪಿ, ಬೆಂಗಳೂರು

Description	Unit	No	Measurements				Depth	Qty
			Length	Width		Avg Width (W1+W2)/2		
				W1	W2			
12								

Cement concrete pavement:Providing and constructing un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base, with 43 grade cement or any other type as per Clause 1501.2.2 M30 (Grade), coarse and fine aggregates conforming to IS:383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a concrete mixer of not less than 0.2 cum capacity and appropriate weigh batcher using approved mix design, laid in laboured fixed side formwork (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the formwork as per drawing), spreading the concrete with shovels, rakes, compacted using needle, screed and plate vibrators and finished in continuous operation including construction joints, , primer, sealant , curing of concrete slabs for 14-days, and water finishing to lines and grade as per drawing and technical specification clause 1501 with all lead, lifts, loading & unloading charges, cost and conveyance of all materials, labour, equipments etc., complete, as per the directions of the Engineer-in-charge of the work.

1st cross Rakeary Side Road								
Ch 0.00 to 30.00m	Cum	1	30.00	3.50	3.90	3.70	0.15	16.65
Ch 30.00 to 60.00m		1	30.00	3.90	4.00	3.95	0.15	17.78
Ch 60.00 to 78.00m		1	18.00	4.00	2.80	3.40	0.15	9.18
After Culvert								
Ch 0.00 to 16.50m		1	16.50	2.80	1.90	2.35	0.15	5.82
Ch 16.50 to 31.5.50m		1	15.00	1.10	0.90	1.00	0.15	2.25
1st Sub Cross		1	28.80	1.50	1.30	1.40	0.15	6.05
1st Main (Aladamara Road)								
Ch 0.00 to 30.00m	Cum	1	30.00	6.50	6.00	6.25	0.12	22.50
Ch 30.00 to 60.00m		1	30.00	6.00	6.10	6.05	0.12	21.78
Ch 60.00 to 63.00m		1	3.00	6.10	5.60	5.85	0.12	2.11
upto Culvert		1	23.20	6.20	5.60	5.90	0.15	20.53
Aladamara side area		1	14.80	4.00	5.50	4.75	0.15	10.55
From 6th Cross to End								
Ch 0.00 to 30.00m		1	30.00	5.50	3.40	4.45	0.15	20.03
Ch 30.00 to 60.00m		1	30.00	3.40	3.00	3.20	0.15	14.40
Ch 60.00 to 90.00m		1	24.20	3.00	2.80	2.90	0.15	10.53
5th cross		1	26.20	4.90	4.00	4.45	0.15	17.49
6th Cross Road								
Ch 0.00 to 30.00m		1	30.00	3.70	4.70	4.20	0.15	18.90
Ch 30.00 to 45.50m		1	15.50	4.70	4.00	4.35	0.15	10.11
6th Sub Cross Road								
Ch 0.00 to 30.00m		1	30.00	2.40	3.50	2.95	0.15	13.28
Ch 30.00 to 60.00m		1	30.00	3.50	3.00	3.25	0.15	14.63
Ch 60.00 to 79.00m		1	19.00	3.00	3.50	3.25	0.15	9.26
Sahyadri Layout (Back to Front)								
End Pice		1	6.00	2.00	1.90	1.95	0.15	1.76
Ch 0.00 to 30.00m		1	30.00	3.60	3.40	3.50	0.15	15.75
Ch 30.00 to 33.60m		1	3.60	3.40	2.90	3.15	0.15	1.70
After Culvert								
Ch 0.00 to 30.00m		1	30.00	4.90	4.00	4.45	0.15	20.03
Ch 30.00 to 60.00m		1	30.00	4.00	4.00	4.00	0.15	18.00
Ch 60.00 to 90.00m		1	30.00	4.00	4.40	4.20	0.15	18.90
Ch 90.00 to 106.6.00m		1	10.60	4.40	4.30	4.35	0.15	6.92
Ch 106.60 to 128.70m		1	28.10	3.30	4.00	3.65	0.15	15.38
							TOTAL WORK DONE QTY	362.23
							QUANTITY LIMITED TO	347.47

K-Mcc 13/4/20 14/4/22